

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

# Pham 163869 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163869 has 26 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Daubenski 114
- Track 2: Persimmon\_159, Navo\_162, Braelyn\_161, WhereRU\_163
- Track 3: WhereRU\_143, Persimmon\_141
- Track 4: Persimmon\_40, WhereRU\_43, Leo04\_45
- Track 5: Braelyn 43, Navo 44
- Track 6 : Anedea\_43
- Track 7 : Spilled 47
- Track 8 : JimJam 171
- Track 9 : Mugiwara 178
- Track 10 : Elmer 156
- Track 11 : Tomas 48
- Track 12 : Gibbi 50
- Track 13 : JimJam\_149Track 14 : Wofford\_45
- Track 15 : UNTPL 74
- Track 16: Forrest 176
- Track 17 : TunaTartare\_106
- Track 18: MeganTheeKilla 153
- Track 19 : Magritte\_112

# Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 19, it was called in 5 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Braelyn\_161, Forrest\_176, Magritte\_112, Navo\_162, Persimmon\_159, UNTPL 74, WhereRU 163.

Genes that have the "Most Annotated" start but do not call it:

Mugiwara\_178,

Genes that do not have the "Most Annotated" start:

• Anedea\_43, Braelyn\_43, Daubenski\_114, Elmer\_156, Gibbi\_50, JimJam\_149, JimJam\_171, Leo04\_45, MeganTheeKilla\_153, Navo\_44, Persimmon\_141, Persimmon\_40, Spilled\_47, Tomas\_48, TunaTartare\_106, WhereRU\_143, WhereRU\_43, Wofford\_45,

# **Summary by start number:**

# Start 9:

- Found in 2 of 26 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: TunaTartare\_106 (BK1),

## Start 10:

- Found in 8 of 26 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 4 of 17
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Braelyn\_43 (BE1), Leo04\_45 (BE1), Navo\_44 (BE1), Persimmon\_40 (BE1), WhereRU\_43 (BE1), Wofford\_45 (BE2),

## Start 13:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anedea\_43 (BE1),

#### Start 15:

- Found in 2 of 26 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elmer\_156 (BE2), MeganTheeKilla\_153 (BK1),

## Start 18:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JimJam\_171 (BE2),

#### Start 19:

- Found in 8 of 26 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 5 of 17
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Braelyn\_161 (BE1), Forrest\_176 (BK1), Magritte\_112 (singleton), Navo\_162 (BE1), Persimmon\_159 (BE1), UNTPL\_74 (BH), WhereRU\_163 (BE1),

#### Start 26:

- Found in 1 of 26 (3.8%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tomas\_48 (BE2),

# Start 28:

- Found in 2 of 26 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gibbi\_50 (BE2), Spilled\_47 (BE2),

### Start 30:

- Found in 2 of 26 (7.7%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daubenski\_114 (BE1), JimJam\_149 (BE2),

## Start 33:

- Found in 4 of 26 (15.4%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Mugiwara\_178 (BE2),

#### Start 35

- Found in 2 of 26 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Persimmon\_141 (BE1), WhereRU\_143 (BE1),

# **Summary by clusters:**

There are 5 clusters represented in this pham: BE2, singleton, BE1, BH, BK1,

## Info for manual annotations of cluster BE1:

- •Start number 10 was manually annotated 3 times for cluster BE1.
- •Start number 19 was manually annotated 2 times for cluster BE1.
- •Start number 30 was manually annotated 1 time for cluster BE1.
- •Start number 35 was manually annotated 1 time for cluster BE1.

## Info for manual annotations of cluster BE2:

- •Start number 10 was manually annotated 1 time for cluster BE2.
- •Start number 18 was manually annotated 1 time for cluster BE2.
- •Start number 26 was manually annotated 1 time for cluster BE2.
- •Start number 28 was manually annotated 1 time for cluster BE2.
- •Start number 30 was manually annotated 1 time for cluster BE2.

# Info for manual annotations of cluster BH:

•Start number 19 was manually annotated 1 time for cluster BH.

# Info for manual annotations of cluster BK1:

- •Start number 9 was manually annotated 1 time for cluster BK1.
- •Start number 15 was manually annotated 1 time for cluster BK1.
- •Start number 19 was manually annotated 1 time for cluster BK1.

# Gene Information:

Gene: Anedea\_43 Start: 21661, Stop: 22047, Start Num: 13

Candidate Starts for Anedea\_43:

(Start: 10 @21646 has 4 MA's), (12, 21658), (13, 21661), (14, 21691), (22, 21757), (36, 21820), (44, 21883),

Gene: Braelyn\_43 Start: 22198, Stop: 22599, Start Num: 10

Candidate Starts for Braelyn 43:

(Start: 10 @22198 has 4 MA's), (14, 22243), (21, 22306), (36, 22372), (44, 22435),

Gene: Braelyn\_161 Start: 91079, Stop: 91384, Start Num: 19

Candidate Starts for Braelyn\_161:

(Start: 19 @91079 has 5 MA's), (27, 91100), (31, 91112), (54, 91277), (58, 91301),

Gene: Daubenski\_114 Start: 77002, Stop: 77292, Start Num: 30

Candidate Starts for Daubenski\_114:

(1, 76717), (2, 76738), (3, 76753), (5, 76777), (11, 76873), (Start: 30 @77002 has 2 MA's), (42, 77092), (51, 77161), (58, 77191), (65, 77257),

Gene: Elmer 156 Start: 88649, Stop: 88993, Start Num: 15

Candidate Starts for Elmer\_156:

(4, 88460), (6, 88475), (7, 88508), (8, 88535), (Start: 9 @88550 has 1 MA's), (Start: 15 @88649 has 1 MA's), (34, 88733), (50, 88856), (69, 88982),

Gene: Forrest 176 Start: 93990, Stop: 94280, Start Num: 19

Candidate Starts for Forrest 176:

(Start: 19 @93990 has 5 MA's), (32, 94017), (33, 94029), (39, 94074), (40, 94083), (44, 94113), (46, 94149), (66, 94269),

Gene: Gibbi 50 Start: 22359, Stop: 22634, Start Num: 28

Candidate Starts for Gibbi 50:

(Start: 28 @ 22359 has 1 MA's), (44, 22458), (45, 22464), (63, 22584),

Gene: JimJam\_171 Start: 92515, Stop: 92871, Start Num: 18

Candidate Starts for JimJam\_171:

(Start: 10 @92407 has 4 MA's), (Start: 18 @92515 has 1 MA's), (29, 92545), (43, 92647), (51, 92701), (53, 92704), (57, 92731), (70, 92860),

Gene: JimJam\_149 Start: 86635, Stop: 86916, Start Num: 30

Candidate Starts for JimJam\_149:

(Start: 30 @86635 has 2 MA's), (53, 86797), (67, 86905),

Gene: Leo04\_45 Start: 23281, Stop: 23682, Start Num: 10

Candidate Starts for Leo04 45:

(Start: 10 @23281 has 4 MA's), (14, 23326), (44, 23518),

Gene: Magritte\_112 Start: 72994, Stop: 73305, Start Num: 19

Candidate Starts for Magritte\_112:

(Start: 19 @72994 has 5 MA's), (32, 73030), (33, 73042), (41, 73102), (48, 73168), (56, 73201), (60, 73228), (64, 73270),

Gene: MeganTheeKilla\_153 Start: 84120, Stop: 84458, Start Num: 15

Candidate Starts for MeganTheeKilla\_153:

(Start: 15 @84120 has 1 MA's), (16, 84123), (25, 84165), (37, 84234), (49, 84327), (51, 84333), (61, 84387), (68, 84450),

Gene: Mugiwara\_178 Start: 93339, Stop: 93584, Start Num: 33

Candidate Starts for Mugiwara 178:

(Start: 19 @93300 has 5 MA's), (32, 93327), (33, 93339), (46, 93459), (62, 93546),

Gene: Navo\_44 Start: 22093, Stop: 22494, Start Num: 10

Candidate Starts for Navo 44:

(Start: 10 @22093 has 4 MA's), (14, 22138), (21, 22201), (36, 22267), (44, 22330),

Gene: Navo\_162 Start: 90460, Stop: 90765, Start Num: 19

Candidate Starts for Navo\_162:

(Start: 19 @90460 has 5 MA's), (27, 90481), (31, 90493), (54, 90658), (58, 90682),

Gene: Persimmon 159 Start: 89776, Stop: 90081, Start Num: 19

Candidate Starts for Persimmon\_159:

(Start: 19 @89776 has 5 MA's), (27, 89797), (31, 89809), (54, 89974), (58, 89998),

Gene: Persimmon\_40 Start: 21025, Stop: 21426, Start Num: 10

Candidate Starts for Persimmon 40:

(Start: 10 @21025 has 4 MA's), (14, 21070), (44, 21262),

Gene: Persimmon\_141 Start: 85415, Stop: 85672, Start Num: 35

Candidate Starts for Persimmon\_141:

(17, 85337), (20, 85355), (Start: 35 @85415 has 1 MA's), (38, 85442), (55, 85553),

Gene: Spilled\_47 Start: 22319, Stop: 22594, Start Num: 28

Candidate Starts for Spilled\_47:

(Start: 28 @22319 has 1 MA's), (36, 22355), (44, 22418), (45, 22424), (63, 22544),

Gene: Tomas\_48 Start: 24558, Stop: 24836, Start Num: 26

Candidate Starts for Tomas 48:

(24, 24552), (Start: 26 @ 24558 has 1 MA's), (36, 24597), (44, 24660), (45, 24666), (47, 24702),

Gene: TunaTartare\_106 Start: 73259, Stop: 73636, Start Num: 9

Candidate Starts for TunaTartare\_106:

(Start: 9 @73259 has 1 MA's), (14, 73304), (44, 73487), (57, 73559), (61, 73589),

Gene: UNTPL\_74 Start: 50402, Stop: 50737, Start Num: 19

Candidate Starts for UNTPL\_74:

(Start: 19 @50402 has 5 MA's), (32, 50423), (33, 50435), (52, 50576), (68, 50696), (70, 50732),

Gene: WhereRU 143 Start: 86167, Stop: 86424, Start Num: 35

Candidate Starts for WhereRU\_143:

(17, 86089), (20, 86107), (Start: 35 @86167 has 1 MA's), (38, 86194), (55, 86305),

Gene: WhereRU\_43 Start: 21615, Stop: 22016, Start Num: 10

Candidate Starts for WhereRU 43:

(Start: 10 @21615 has 4 MA's), (14, 21660), (44, 21852),

Gene: WhereRU\_163 Start: 90528, Stop: 90833, Start Num: 19

Candidate Starts for WhereRU\_163:

(Start: 19 @90528 has 5 MA's), (27, 90549), (31, 90561), (54, 90726), (58, 90750),

Gene: Wofford\_45 Start: 23131, Stop: 23520, Start Num: 10

Candidate Starts for Wofford\_45:

(Start: 10 @23131 has 4 MA's), (12, 23143), (14, 23176), (22, 23242), (23, 23245), (36, 23293), (44,

23356), (59, 23446),